



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of

U.S. Patent No. : US 6,392,863 B1  
Issued : May 21, 2002  
Title : BANKNOTE VALIDATOR  
Docket No. : INN 0004 PA

Certificate  
SEP 25 2002  
of Correction

Commissioner for Patents  
2002 Certificate of Correction Branch  
Washington, DC 20231

CERTIFICATE OF MAILING  
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on September 16, 2002.

Susan M. Luna  
Susan M. Luna, Patent Agent Reg. No. 38,769

#13  
RDM

Sir:

REQUEST FOR CERTIFICATE OF CORRECTION FOR PTO MISTAKE  
UNDER 35 U.S.C. 254 and 37 C.F.R. 1.322

In the matter of U.S. Patent No. 6,392,863 B1, it is respectfully requested that a Certificate of Correction be issued to cover the following errors on the attached Certificate of Correction (PTO/SB/44) which occurred in the printing of the patent.

REMARKS

It is respectfully requested that a Certificate of Correction be issued for the above-identified patent. All of the errors occurred during the printing of the patent and, therefore, no fee is due. Two (2) copies of the required Certificate of Correction Form PTO/SB/44 are enclosed.

Respectfully submitted,  
KILLWORTH, GOTTMAN, HAGAN  
& SCHAEFF, L.L.P.

By Susan M. Luna  
Susan M. Luna  
Registration No. 38,769

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SML/amm  
Encl.

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(Also Form PTO-1050)

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO : 6,392,863 B1

DATED : May 21, 2002

INVENTOR(S) : Peter Dunlop, Kevin Ashurst

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

## (57) ABSTRACT

The abstract should read as follows:

--A banknote validator includes magnetic and optical sensors (305, 306, 307) and a non-return gate in its banknote path (80).

The magnetic sensor (307) comprises a magnetic circuit and an electronic circuit. The magnetic circuit comprising a yoke (402) and two giant magneto-resistors (400, 401) and the electronic circuit comprises a coil (407) arranged to generate a magnetic field in the yoke (402) and first and second feedback control loops. The first loop is responsive to the output of the first giant magneto-resistor (400) to energise the coil (407) so that the giant magneto-resistor operates in a predetermined region of its characteristic. The second loop is responsive to the differential between the giant-magneto-resistor outputs to generate a bias voltage for the second giant-magneto-resistor (401) tending to cause the differential to be zero.

The optical sensor (305,306) comprises a trapezoidal light guide (34, 104), a broadband light source (350) for illuminating a banknote via the light guide (34, 104) and sensors (351, 352, 353) for detecting light reflected from the banknote via the light guide (34, 104). Filters (354, 355, 356) are arranged in front of the sensors (351, 352, 353). The light guide (34,104) is inclined relative to the banknote path (6).

The non-return gate (80) does not need to be actively driven but falls when a banknote has passed and, when the banknote's direction of travel is reversed, guides the banknote along an accept path. If the banknote has not fully passed the non-return gate (80) when its direction is reversed, it is driven back to the validator's note insertion slot.--;

Col. 1, after the title, insert the following --The present invention relates to a banknote validator.--;

Col. 1, line 13, "have be en used" should be --have been used--;

Col. 5, line 27, "front wall 17ad" should be --front wall 17d--;

Col. 5, line 45, "bowed toflat" should be --bowed to flat--;

MAILING ADDRESS OF SENDER: Killworth, Gottman, Hagan & Schaeff LLP  
One Dayton Centre  
One South Main Street, Suite 500  
Dayton, Ohio 45402-2023

PATENT NO. 6,392,863 B1

No. of additional copies

 1 of 2

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*page 2 of 2*

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Col. 6, line 7, "A first tired wheel" should be --A first tyred wheel--; ✓  
Col. 6, line 8, "and a second tired wheel 43" should be --and a second tyred wheel 43--;  
Col. 6, line 10, "second tired wheels 42, 43" should be --second tyred wheels 42, 43--;  
Col. 6, line 13, "second tired wheels 42, 43" should be --second tyred wheels 42, 43--;  
Col. 6, line 32, "Third and fourth tired wheels" should be --Third and fourth tyred wheels--;  
Col. 6, line 33, "first and second tired wheels 42, 43" should be --first and second tyred wheels 42, 43--;  
Col. 6, line 34, "third and fourth tired wheels 50, 51" should be --third and fourth tyred wheels 50, 51--;  
Col. 6, line 63, "third and fourth tired wheels 50, 51." should be --third and fourth tyred wheels 50, 51.--;  
Col. 7, line 45, "A fifth tired wheel 88" should be --A fifth tyred wheel 88--;  
Col. 7, line 48, "A sixth tired wheel 89" should be --A sixth tyred wheel 89--;  
Col. 7, line 51, "with the sixth tired wheel 89" should be --with the sixth tyred wheel 89--;  
Col. 7, line 53, "The sixth tired wheel 89" should be --The sixth tyred wheel 89--;  
Col. 7, line 58, "The fifth tired wheel 88" should be --The fifth tyred wheel 88--;  
Col. 8, line 13, "second tired wheels 42, 43." should be --second tyred wheels 42, 43.--;  
Col. 9, line 33, "is alsofed to the" should be --is also fed to the--;  
Col. 11, line 6, "second tired wheels 42, 43," should be --second tyred wheels 42, 43,--;  
Col. 11, line 9, "second tired wheels 42, 43" should be --second tyred wheels 42, 43--;  
Col. 11, line 10, "sixth tired wheels 88, 89," should be --sixth tyred wheels 88, 89,--;  
Col. 11, line 11, "second tired wheels 42, 43." should be --second tyred wheels 42, 43.--;  
Col. 11, line 30, "according to the following algorithms" should be --according to stored algorithms--;  
Col. 11, line 36, "fourth tired wheels 50, 51" should be --fourth tyred wheels 50, 51--;  
Col. 11, line 48, "fourth tired wheels 50, 51" should be --fourth tyred wheels 50, 51--;  
Col. 11, line 61, "The fifth tired wheel 88" should be --The fifth tyred wheel 88--;  
Col. 12, line 1, "the first tired wheel 42," should be --the first tyred wheel 42,--; and  
Col. 12, line 50, "A banknote validator according to any one of claim 1," should be --A banknote validator according to claim 1,--.

MAILING ADDRESS OF SENDER: Killworth, Gottman, Hagan & Schaeff LLP  
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Col. 1, after the title, insert the following --The present invention relates to a banknote validator.--;

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Col. 11, line 61, "The fifth tired wheel 88" should be --The fifth tyred wheel 88--;  
Col. 12, line 1, "the first tired wheel 42," should be --the first tyred wheel 42--; and  
Col. 12, line 50, "A banknote validator according to any one of claim 1," should be --A banknote validator according to claim 1--.

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INVENTOR(S) : Peter Dunlop and Kevin Ashurst

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1,

After the title, insert the following -- The present invention relates to a banknote validator. --;

Line 13, "have be en used" should be -- have been used --;

Column 5,

Line 27, "front wall 17ad" should be -- front wall 17d --;

Line 45, "bowed toflat" should be -- bowed to flat --;

Column 6,

Line 7, "A first tired wheel" should be -- A first tyred wheel --;

Line 8, "and a second tired wheels 43" should be -- and a second tyred wheel 43 --;

Lines 10 and 13, "second tired wheels 42, 43" should be -- second tyred wheels 42, 43 --;

Line 32, "Third and fourth tired wheels" should be -- Third and fourth tyred wheels --;

Line 33, "first and second tired wheels 42, 43" should be -- first and second tyred wheels 42, 43 --;

Line 34, "third and fourth tired wheels 50, 51" should be -- third and fourth tyred wheels 50, 51 --;

Line 63, "third and fourth tired wheels 50, 51." should be -- third and fourth tyred wheels 50, 51. --;

Column 7,

Line 45, "A fifth tired wheel 88" should be -- A fifth tyred wheel 88 --;

Line 48, "A sixth tired wheel 89" should be -- A sixth tyred wheel 89 --;

Line 51, "with the sixth tired wheel 89" should be -- with the sixth tyred wheel 89 --;

Line 53, "The sixth tired wheel 89" should be -- The sixth tyred wheel 89 --;

Line 58, "The fifth tired wheel 88" should be -- The fifth tyred wheel 88 --;

Column 8,

Line 13, "second tired wheel 42, 43." should be -- second tyred wheels 42, 43. --;

Column 9,

Line 33, "is alsoted to the" should be -- is also fed to the --;

Column 11,

Line 6, "second tired wheels 42, 43," should be -- second tyred wheels 42, 43, --;

Line 9, "second tired wheels 42, 43" should be -- second tyred wheels 42, 43 --;

Line 10, "sixth tired wheels 88, 89," should be -- sixth tyred wheels 88, 89, --;

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Page 2 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 11 cont'd.

Line 30, "according to the following algorithms" should be -- according to stored algorithms --;

Lines 36 and 48, "fourth tired wheels 50, 51" should be -- fourth tyred wheels 50, 51 --;

Line 61, "The fifth tired wheel 88" should be -- The fifth tyred wheel 88 --;

Column 12.

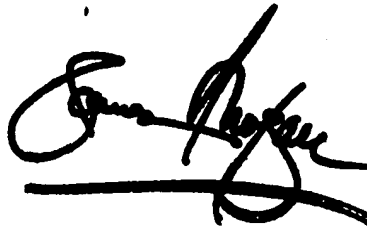
Line 1, "the first tired wheel 42," should be -- the first tyred wheel 42, --; and

Line 50, "A banknote validator according to any one of claim 1," should be

-- A banknote validator according to claim 1, --.

Signed and Sealed this

Seventh Day of January, 2003

A handwritten signature in black ink, appearing to read "James E. Rogan", with a long horizontal stroke underneath.

JAMES E. ROGAN  
*Director of the United States Patent and Trademark Office*